Supplemental Table 1 - Details on GIS-based source indicators

Source Category	Data Source	Resolution/positional accuracy	Links to Sources
Traffic Indicators	New York Metropolitan Transportation Council (NYMTC) traffic data,2005	Link level data assigned to street centerline data generated by Tele Atlas	http://www.nymtc.org/
	U.S. Federal Highway Administration Highway Performance Monitoring System (HPMS) data, 2007	Data linked to National Highway Planning Network line file; accuracy +- 80m	www.bts.gov/publications/national_transportation_atlas_database/2011/
	Accident Location Information System (ALIS) road network data, 2008	+/- 40 ft	http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=932
	MPSI TrafficMetrix TM data, 1989-2006	Linked to ALIS road network	www.mpsisolutions.com
	NYC Department of Transportation (DOT) traffic signals, truck and bus routes, 2008	Truck and bus routes aligned to aerial imagery with +/-2 ft resolution; traffic signals geocoded using NYC Dept of City Planning Geosupport, no statement regarding positional accuracy	http://a841-dotweb01.nyc.gov/datafeeds/
Population Metrics	U.S. Census Bureau 2000 data	Census block	http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
	Oak Ridge National Laboratory LandScan TM data, 2006	3 arc second	http://www.ornl.gov/sci/landscan/
Built Space	NYC Department of City Planning Primary Land Use Tax Lot Output (PLUTO TM) data, 2007	1:250 ft	http://www.nyc.gov/html/dcp/html/bytes/applbyte.shtml

Permitted Emissions	NYS Department of Environmental Conservation (DEC) permit data, 2005	No statement regarding positional accuracy	http://www.dec.ny.gov/chemical/68524.html
	NYC Department of Environmental Protection (DEP) permit data, 2008	Geocoded using NYC Dept of City Planning Geosupport, no statement regarding positional accuracy	http://www.nyc.gov/html/dep/html/air/index.shtml
	NYC Department of Buildings (DOB) permit data, 2008	Geocoded using NYC Dept of City Planning Geosupport, no statement regarding positional accuracy	http://www.nyc.gov/html/dob/html/bis/bis.shtml
Transportation Facilities	NYC Department of Citywide Administrative Services, 2008	Geocoded using NYC Dept of City Planning Geosupport, no statement regarding positional accuracy	https://nycopendata.socrata.com/Facilities-and-Structures/IPIS- Integrated-Property-Information-System-/n5mv-nfpy
	NYC Department of Education, 2008	Geocoded using NYC Dept of City Planning Geosupport, no statement regarding positional accuracy	http://schools.nyc.gov/default.htm
Distributed Facilities	NYC Department of Sanitation inspections of private waste transfer stations	Geocoded using NYC Dept of City Planning Geosupport, no statement regarding positional accuracy	http://www.nyc.gov/html/dsny/html/home/home.shtml
	NYC Department of Citywide Administrative Services,2008	Geocoded using NYC Dept of City Planning Geosupport, no statement regarding positional accuracy	https://nycopendata.socrata.com/Facilities-and-Structures/IPIS- Integrated-Property-Information-System-/n5mv-nfpy
Land cover	USGS impervious surface, 2001	85 ft resolution	http://seamless.usgs.gov/imperv.php
	NYC Department of Parks EMERGE dataset, 2001	3 ft resolution	http://www.nycgovparks.org/
Built/natural topography	NYC DOITT building heights,2009	+/- 2 ft	http://www.nyc.gov/html/doitt/html/citywide/gis_downloads.shtml
	NYC DOITT elevation DEM, 2006	1 ft	http://www.nyc.gov/html/doitt/html/citywide/gis_downloads.shtml